

# SEQUENCE LISTING

<110> KOCHENDOERFER, GERD G.  
 SHAO, HAIYAN  
 CRESSMAN, SONYA

<120> MULTIPLEX POLYMER LIGATION

<130> GRFN-047

<150> 60/437,511  
 <151> 2002-12-30

<150> 60/515,609  
 <151> 2003-10-29

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 <221> VARIANT  
 <222> (58)...(58)  
 <223> Xaa = a non-native lysine chemically modified at the epsilon-amino group with an oxime linker group coupled to a designated water-soluble polymer through an oxime bond(or intermediates which contain AoA)

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 <223> Xaa = Nle (norleucine)

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 <223> Xaa = Nle (norleucine)

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 <223> Xaa = psi (non-native amino acid residue consisting of a cysteine that is carboxamidemethylated at the sulfhydryl group)

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 <223> Xaa = a non-native lysine chemically modified at the epsilon-amino group with an oxime linker group coupled to a designated water-soluble polymer through an oxime bond(or intermediates which contain AoA)

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			20					25					30		
Glu	Lys	Leu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu	Glu	Leu	Val
		35					40					45			
Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Xaa	Ala	Pro	Leu	Ser	Ser	Cys
	50					55					60				
Pro	Ser	Gln	Ala	Leu	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln	Leu	His	Ser
65					70					75					80
Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Glu	Gly	Ile	Ser
				85					90					95	
Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp	Val	Ala	Asp
			100					105					110		
Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Xaa	Glu	Glu	Leu	Gly	Xaa	Ala	Pro
		115				120						125			
Ala	Leu	Xaa	Pro	Xaa	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala	Ser	Ala	Phe
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Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu	Gln	Ser	Phe
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<222> (17)...(17)

<223> Xaa = Abu (Aminobutyric acid)

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<222> (121)...(121)

<223> Xaa = Nle (norleucine)

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<223> Xaa = a non-native lysine chemically modified at the epsilon-amino group with an oxime linker group coupled to a designated water-soluble polymer through an oxime bond(or intermediates which contain AoA)

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Xaa	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln
			20					25					30		
Glu	Lys	Leu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu	Glu	Leu	Val
		35					40					45			
Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Xaa	Ala	Pro	Leu	Ser	Ser	Cys
	50					55					60				
Pro	Ser	Gln	Ala	Leu	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln	Leu	His	Ser
65					70				75						80
Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Glu	Gly	Ile	Ser
				85					90					95	
Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp	Val	Ala	Asp
			100					105					110		
Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Xaa	Glu	Glu	Leu	Gly	Xaa	Ala	Pro
		115				120						125			
Ala	Leu	Xaa	Pro	Xaa	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala	Ser	Ala	Phe
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Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu	Gln	Ser	Phe
145					150					155					160
Leu	Glu	Val	Ser	Tyr	Arg	Val	Leu	Arg	His	Leu	Ala	Gln	Pro		
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